

HEADPHONES

INTRODUCTION

A good pair of headphones can transform the way you listen to music, whether you're connecting them to a classic valve amplifier or the latest MP3 player. Some affordable modern headphones use technology that used to be found only in the stage equipment of professional musicians, so you can get close to a professional sound without spending a fortune.

At the lower end of the price scale, you can still get a light, comfortable pair of headphones that outperforms the mediocre sets that come with most popular MP3 players. If you spend a bit more, you can get a noise-cancelling set that blocks out the noise of the commute.

We've gathered 18 sets of headphones with a range of styles. We have not included dedicated gaming headsets or wireless headphones, and have instead focused on sets that will make the most of your music. However much you want to spend, there's a pair of headphones here for you.

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HEAD STRONG

Whether you just want something light and comfortable, or you need to block out all outside noise, you're sure to find something to suit you in our review of 18 headphone sets

Choosing... Headphones

Before you buy a pair of headphones, consider when you'll be using them. You can get headphones or earphones. Earphones are designed to be inserted into the ear canal or rest just outside it. They're light and portable, so they are ideal for listening to music on the move, although low-quality versions can be uncomfortable to wear.

Headphones are usually larger, and held in place by a headband or hooks behind the ears. However, they can be hot, sweaty and inconvenient to wear in public, so are better suited to home use.

SOUND DESIGN

Comfort is as important as audio quality when you're buying a pair of headphones that you may want to wear for hours on end. If you buy an MP3 player, you'll inevitably get a pair of earphones with it. These are usually the in-ear type, which rest in the folds of the outer ear. They can be comfortable to wear, but most don't block much outside noise.

The amount of sound let in depends on whether your headphones have an open or closed driver. The driver is the internal transducer that creates the audio output. Headphones with open drivers have vents in the rear housing. This allows sound waves to travel away from the transducer in all directions, and prevents distortion caused by sound resonating with the housing.

This means that people around you will be able to hear your music. This is referred to as a sound leak. It also means there's nothing to prevent you hearing outside noise. This can be useful if you want to be aware of your surroundings, but in loud environments you'll have to turn the volume up to drown out other sounds, which can damage your hearing.

Closed headphones provide a more personal listening experience. Without any gaps in the housing, external noises aren't as audible, so you can listen comfortably at lower volumes. Furthermore, your music won't be heard by those around you. Although some closed headphones can suffer from slight distortion, a well-designed pair should present no such problems.

THE SOUND OF SILENCE

If you work or travel in a noisy environment, you'll want to block out ambient noise and external distractions. Active noise-cancellation uses microphones to pick up ambient noise and circuitry to generate an interfering sound wave to cancel out the background noise. This works best with regular, low-frequency sounds, such as engine noise, but does little against other sounds.

Passive noise-cancellation headphones can block out a wider range of sounds. They're usually sound-isolating earphones designed to block the ear canal, preventing most sounds ever reaching the eardrum.

HEADPHONES

NON-NOISE CANCELLING

MAXELL Jelleez

★★★★

£3.11 inc VAT
From www.aprmedia.co.uk



Maxell's brightly coloured Jelleez certainly look appealing, but we had trouble getting to grips with the unusual position we had to wear them in. The manual doesn't include any relevant instructions, but once we had swivelled the earphones round to trap their protruding lip against our ear, they managed to stay in place reasonably well.

The back of the earphones' housing is perforated to create a more natural sound and greater volume. They're well suited to most pop, rock and dance music, with powerful bass. Although they don't have the most detailed high and mid-range sound in the group, they acquitted themselves well with a better audio performance than many more expensive sets and little audio leakage.

The biggest problem with the Jelleez is wearing them. Although the manufacturer claims the earphones have a "soft comfort fit", their front is made of hard, unyielding plastic. This makes them difficult to keep in place and position correctly. It lets down an otherwise good set of budget earphones.

EARBUDS 3.5mm stereo jack plug, 90cm cable, 6g
PART CODE 190523
DETAILS www.maxell.eu.com
✓ Good audio quality
✗ Difficult to fit; uncomfortable

PHILIPS SHE2550 Extra Bass

★★★★★

£3.31 inc VAT
From www.yoyotech.co.uk



Philips' basic but comfortable SHE2550 earphones produce clear, powerful sound. As their name promises, they put out loud, solid bass tones, which made a real impression when playing our drum and bass test tracks. Despite their use of open drivers, which create full, natural-sounding audio, the earphones don't let in much background noise. They leaked badly, though.

Most pop and rock music sounded great, although we had to adjust the bass settings of our audio source to make the best of some tracks. Higher notes were reproduced accurately. Although the bass instruments overpowered some orchestral pieces, softer classical music pieces sounded surprisingly good.

They didn't sound as precise as some high-end headphones in the group, but we enjoyed listening to music with them, and the heavy bass didn't detract from our enjoyment. They have excellent audio quality for the price, and win a Budget Buy award.

EARBUDS 3.5mm stereo jack plug, 1.1m cable, 8g
PART CODE SHE2550/00
DETAILS www.philips.co.uk
✓ Excellent value
✓ Good audio quality; comfortable

TESCO Technika TA-708 Full Size Headphones

★★★

£7.97 inc VAT
From <http://direct.tesco.com>



We'd have loved it if Tesco's budget Technika TA-708 headphones had outperformed their more expensive rivals, but unfortunately their quality reflects their price.

Their sound, although warm, is muddy and indistinct. Even when we turned up the volume, our music lacked clarity and fine detail. Build quality is poor, with flimsy size adjusters. The headphones are light and not too uncomfortable to wear for long listening sessions, although their foam pads can get a bit warm after a while.

At a budget price of under £8, these headphones just about serve their purpose, but you're not going to uncover any new subtleties in your favourite music with them. Their audio quality is inferior to that of many of the earphones that come free with MP3 players. If you want a cheap pair of headphones, then Maxell's HP-550F set is a better buy.

OVER-EAR HEADPHONES 3.5mm stereo jack plug, 1.7m cable, 172g
PART CODE TA-708
DETAILS <http://direct.tesco.com>
✓ Inexpensive
✗ Size adjusters don't stay in position; indistinct sound

MAXELL HP-550F Foldable Full Cup Headphones

★★★★

£10 inc VAT
From www.amazon.co.uk



The retro styling of Maxell's HP-550F folding headphones makes them look more expensive than their price. They fold down to a compact size. Their looks, with metallic gold colouring and metal frame size adjusters, are a matter of personal taste. A volume control is mounted halfway along the headphone cable.

Audio quality is respectable. Treble and mid-range tones are well defined, resulting in crisp reproduction of guitars and vocals in rock and pop songs, and clear orchestral music. The bass is underpowered, which didn't have a noticeable effect on heavy bass beats, but stole warmth from low vocals and orchestral tones. Bass-boosted EQ settings improved this.

The headphones were light and comfortable to wear, but some may find that they put too much pressure on the tops of the ears. Maxell's HP-550F headphones sound surprisingly good for the price, but the lack of bass could be a problem for some.

OVER-EAR HEADPHONES 3.5mm stereo jack plug, 1.52m cable, 122g
PART CODE 190562
DETAILS www.maxell.eu.com
✓ Good value; clear sound
✗ Not enough bass

ZALMAN ZM-DS4

★★★★

£14 inc VAT
From www.yoyotech.co.uk



Zalman's ZM-DS4 is a set of folding headphones, which is unusual in that each earpiece contains separate woofer and tweeter units to handle low- and high-range sounds. The headphones feel fragile, and the hinge in the middle of the headband got caught in our hair. Fortunately, audio quality is great.

They did particularly well with vocals, bringing clarity to even harsh, distorted or quiet voices. Instrumental and rhythm parts were also clear, although audio reproduction wasn't perfect. Some tracks lacked their usual warmth and depth. This was noticeable in orchestral music where high notes, particularly from brass instruments, sounded harsh. The closed earpieces didn't do much to cut out background noise, which makes them less than ideal for commuting, but our colleagues couldn't hear our music.

Zalman's ZM-DS4 headphones are comfortable to wear and sound surprisingly good for their price, but they feel flimsy and don't come with a carry case, so we wouldn't feel confident using them on the move.

OVER-EAR HEADPHONES 3.5mm stereo jack plug, 1.5m cable, 122g
PART CODE ZM-DS4
DETAILS www.zalman.co.kr
✓ Good value; very good audio quality
✗ Flimsy build quality

PHILIPS SHE9700

★★★★★

£16 inc VAT
From www.lambda-tek.com/componentsshop



Philips' SHE9700 earphones look like a fairly standard ear-canal set, and they don't offer anything extraordinary in terms of features. They use Philips' Angletube design, intended to create a secure fit and direct sound straight towards your eardrum, whatever size or shape your ears are. They come with three rubber sleeves in different sizes. Once we'd selected the correct one, the earphones were comfortable. This kind of angled design isn't unique to Philips' earphones, but this is one of the most affordable sets we've seen to use it.

The earphones' sound quality was crisp and focused, and we were pleased with the results on everything from overdriven guitars to delicate acoustic tracks. The bass was powerful without overwhelming the rest of the sound, and we were easily able to hear fine details in even the busiest passages of music.

Philips' SHE9700 earphones have a well-balanced sound, comfortable design and a very reasonable price. These in-ear earphones win a Best Buy award.

EARPLUGS 3.5mm stereo jack plug, 60cm cable, 6g
PART CODE SHE9700/00
DETAILS www.philips.co.uk
✓ Excellent value; comfortable
✓ Very good audio quality

SAITEK A300 Stereo Headphones

★★★★

£16 inc VAT
From www.yoyotech.co.uk



Satek's A300 Stereo Headphones are a cross between earphones and headphones, and one of the most unusually designed sets here. They look like a pair of earphones attached to hooks that loop over the backs of the ears.

At first they were hard to position correctly. We'd have preferred it if the plastic ear-hooks were more flexible. The earpieces were well positioned for optimal audio quality, but felt too big for comfort. The standard cable is short, but two 70cm extension leads are included.

Music was clear and pleasant to listen to with a wide range of bass tones, but the bass overpowered higher notes on some tracks. This wasn't ideal for music but worked well with games and movies, especially during explosions.

Like most of Satek's products, these earphones are designed with gaming in mind, but we found them uncomfortable to wear during long sessions. They could work well if you've got large ears, but this design definitely isn't for everyone.

EARBUDS 3.5mm stereo jack plug, 35cm cable, 16g
PART CODE DM06
DETAILS www.saitek.com
☒ Reasonable audio quality
☒ Bass can overpower treble; not very comfortable

SENNHEISER HD 465

★★★★

£32 inc VAT
From www.scan.co.uk



Sennheiser's HD 465 headphones have a long, thick cable and a 3.5mm stereo jack plug with a screw thread and a 1/4in jack adaptor. The plastic headband and adjusters feel well made and hold securely at whatever size you set them to. Not everyone will find the large foam ear pads comfortable, but they evenly distribute the pressure of the tight fit. The headphones have a 3m cable, which plugs into the left earpiece.

The bass was unusually powerful at flat EQ settings. This gave even well-balanced rock songs a heavy undertone, which detracted from guitars and vocals and was an irritating intrusion in light pop music. We liked the thundering impact it had on our drum and bass tracks, though, and the headphones gave us a clear, balanced sound once we'd turned down our bass equaliser.

It's a shame they don't produce more balanced sound, but as long as your audio player gives you control over your bass settings then these headphones are a good buy.

ON-EAR HEADPHONES 3.5mm stereo jack plug, 3m cable, 214g
PART CODE 500157
DETAILS www.sennheiser.co.uk
☒ Well made; good audio quality
☒ Too much bass

PANASONIC RP-HJE500

★★★★

£40 inc VAT
From www.panasonic.co.uk



The white cables and polished aluminium housings of Panasonic's RP-HJE500 earphones may not be to all tastes. We had problems getting them to sit securely and comfortably in our ears. We got the best results by looping the cables over the backs of our ears.

Their rubber sleeves slip over an unusually large oval speaker. Unfortunately, the sleeves themselves are of the usual round shape. This makes them hard to attach and forces them into an oval form, which doesn't fit securely into the ear canal. Positioned correctly, they blocked out a lot of background noise. However, when they shifted in our ears the sleeve would deform, which caused a drop in volume and audio quality.

Sound quality was generally good, with distinct high notes. Bass and lower mid-range tones were less clearly defined and they sometimes sounded distant and muted. This is a reasonable set of earphones, but neither its audio quality nor its comfort can justify its price, especially when compared to Philips' cheaper SHE9700 earphones.

EARPLUGS 3.5mm stereo jack plug, 60cm cable, 6g
PART CODE RP-HJE500
DETAILS www.panasonic.co.uk
☒ Good audio quality
☒ Difficult to fit; fairly expensive

CREATIVE Aurvana Live! Headphones

★★★★★

£65 inc VAT
From www.komplett.co.uk



Creative's Aurvana Live! is a set of high-end headphones. Audio quality is excellent, with vibrant bass, mid-range and treble in perfect balance and clarity. We couldn't fault performance. It was warm and detailed in its reproduction of everything from orchestral music to metal.

We also liked the headphones' design and build quality. They look like a typical set of cans but are lighter than most, something we appreciated during extended listening sessions. The cups can swivel on the headband and the size adjusters hold them securely in place. Extras are limited to a drawstring carrying pouch, an extension lead and a 1/4in converter for the 3.5mm jack plug.

They don't do much to block out ambient noise or keep others from hearing your music, so are best suited to a quiet room. Still, with their comfort and exquisite audio quality, they're our Best Buy for home listening.

OVER-EAR HEADPHONES 3.5mm stereo jack plug, 1.2m cable, 196g
PART CODE 51EF0060AA001
DETAILS www.creative.com
☒ Excellent audio quality; comfortable
☒ Don't block background noise

PASSIVE NOISE CANCELLING

ETYMOTIC RESEARCH ER-6i

★★★★

£66 inc VAT
From www.iheadphones.co.uk



Etymotic Research's ER-6i sound-isolating earphones come with two sets of flanged rubber sleeves and a set of foam sleeves, which expand in your ear. The foam plugs blocked out almost all background noise.

The earphones accurately produced mid- and high range sounds, but lacked bass. This produced a bright sound that worked brilliantly with most dance and guitar-based pop music, but some heavy bass-driven tracks didn't have their usual intensity. Still, we were impressed by the detail and clarity of the audio.

Although they're the quietest of the passive noise-cancellation headphones in the group, we never needed to bring our audio player's volume above 50 per cent thanks to their effective sound isolation.

The earphones are the smallest and lightest in the group, but their sound is anything but small. The slight lack of bass intensity won't be to everyone's taste, but these high-quality earphones are effective with guitar-based pop, trance and light classical music. Shure's SE210 earphones have a more balanced sound, though.

EARPLUGS 3.5mm stereo jack plug, 1.5m cable, 4g
PART CODE ER6i
DETAILS www.etymotic.com
☒ Effective sound insulation; clear sound
☒ Not enough bass

DENON AH-C551

★★★★

£70 inc VAT
From www.johnlewis.com



Denon's AH-C551 earphones include an acoustic optimiser, designed to improve audio quality by ensuring that the air is at the same pressure both behind and in front of the vibrating diaphragm that creates the sound. They're clear, with a powerful bass. If anything, the driving bass is too strong, drowning out the weaker mid-range tones and high notes. We got more balanced and well-defined sound when we reduced the bass volume on our audio source.

The earphones have rubber sleeves, which fit into your ear canal and block out a lot of background noise. They don't fit as securely as those of many other ear-canal phones, as the weight of the metal housings made them shift in our ears. The lead attached to them is only long enough to reach a shirt pocket, but they come with an extension lead as well as spare rubber sleeves and a case.

Despite the over-emphatic bass and high price, this is an excellent set of earphones. Shure's SE120 set of earphones is worth the extra £10, however.

EARPLUGS 3.5mm stereo jack plug, 50cm cable, 8g
PART CODE AH-C551
DETAILS www.denon.co.uk
☒ Effective sound insulation; clear, even sound
☒ Too much bass

HEADPHONES

SHURE
SE210

★★★★★

£80 inc VAT

From www.iheadphones.co.uk

Shure's SE210 earphones are one of four passive noise-cancellation sets in the group. They come with more sleeves than Etymotic's ER-6i earphones, as well as an extension lead and a carrying case, and have an unusually heavy cable. Their foam sleeves expand inside the ear canal to block almost all outside noise. This sensation takes some getting used to, and it's a good idea to switch to the supplied rubber sleeves if you need to be aware of your surroundings.

The sound-isolating effect meant that our music sounded clear and loud even at low volumes. We were astonished by the depth and precision of the earphones' sound, allowing us to hear subtle details in all our music, from distorted electro beats to delicate tremolo violins buried in an orchestra. The sound is exceptionally well balanced, with an intense bass that doesn't overwhelm the finely detailed high and mid-range sounds.

These earphones' elimination of noise and superb audio quality makes them a pleasure to use, and wins them a Best Buy award.

EARPLUGS 3.5mm stereo jack plug, 45cm cable, 10g
PART CODE SE210

DETAILS www.shure.co.uk

- ✓ Very effective sound isolation; excellent audio quality
- ✓ Excellent bass

SHURE
SE310

★★★★★

£110 inc VAT

From www.play.com

Shure's SE310 earphones look very sleek when compared to the square lines of the SE210 model, but there are a few differences to their audio design and appearance. The most significant is the tuned bass port, which allows low-frequency sounds that would otherwise be lost inside the earphone's housing to be directed towards your eardrum. This doesn't create a much more powerful bass sound, but instead means that these earphones are capable of producing a slightly wider, more subtle range of low notes.

This will probably only make a noticeable difference if you're listening to CDs or very high-quality audio files on a high-end player. Like the SE210 earphones, these have astonishing clarity and balance that's excellent for any kind of music. However, casual listeners will find little to distinguish between the performance of the SE310 set and that of the cheaper SE210 earphones.

If you're a serious audio enthusiast, this set may be for you, but the cheaper SE210 earphones are a better buy for most.

EARPLUGS 3.5mm stereo jack plug, 45cm cable, 10g
PART CODE SE310

DETAILS www.shure.co.uk

- ✓ Subtle, wide-ranging bass; excellent audio quality
- ✗ Very expensive

ACTIVE NOISE
CANCELLINGMAXELL
HP/NC-III

★★★★

£20 inc VAT

From www.richersounds.com

Maxell's lightweight folding HP/NC-III headphones have a noise-cancelling unit attached halfway along their cable. It's a bulky device that takes two AAA batteries. The headphones are light and comfortable to wear, if a bit flimsy. The only extras are an aeroplane adaptor and drawstring travel pouch.

Noise cancellation blocked out low consistent hums such as that of our air conditioner, but the lightweight earpieces did nothing to prevent us hearing other background noises. The faint hiss produced by the noise-cancelling circuitry gave us a slight headache. Bass tones sounded more powerful when it was switched on, but there was a harsh edge to mid-range tones, plus an increase in volume and a serious problem with sound leakage.

These headphones are inexpensive for active noise-cancelling headphones and sound reasonable with noise cancelling switched off, but the noise-cancelling circuitry spoils the audio quality. We suggest spending more on Maxell's HP-NC18 noise-cancelling earphones.

OVER-EAR HEADPHONES 3.5mm stereo jack plug,
1.83m cable, 110g
PART CODE HP/NC-III

DETAILS www.maxell.eu.com

- ✓ Inexpensive
- ✗ Leaky; noise-cancellation creates a hiss

MAXELL
HP-NC18

★★★★★

£45 inc VAT

From www.amazon.co.uk

Maxell's HP-NC18 earphones are the in-ear equivalents of the NP-NC22 headphones, which received our Best Buy award in *Shopper* 237. The earphones were light and comfortable to wear, with angled rubber-sleeved tips that slide securely into the ear canal.

Noise cancellation worked well and didn't hiss uncomfortably. It's controlled by a small unit halfway along the cable, which has a volume control that also works when cancellation is turned off.

Like many active noise-cancellation earphones, this set sounded mediocre with noise cancellation disabled. When it was turned off, the earphones produced audio with a distant, muddy quality that affected vocals particularly badly.

Once we'd enabled noise cancellation, the audio was among the best in the group, with deep and vibrant bass notes, clear trebles and almost no chance of disturbance from regular ambient noise. Overall sound quality was distinct and well balanced. This set is also good value at less than £50, so is a great buy if you want active noise cancellation.

EARPLUGS 3.5mm stereo jack plug, 1.6m cable, 14g
PART CODE HP-NC18

DETAILS www.maxell.eu.com

- ✓ Comfortable; good quality with noise cancellation
- ✗ Poor sound without noise cancellation

SENNHEISER
PXC 300

★★★★★

£86 inc VAT

From www.pcwb.com

Sennheiser's folding PXC 300 headphones have a separate noise cancellation unit attached to their cable, which takes two AAA batteries. With it switched off, music sounded distant, but we were impressed by the performance when we activated noise cancellation.

Music sounded bright and clear, with plenty of volume and a bare minimum of hiss from the noise-cancellation circuitry. The headphones sounded best when playing pop and dance music with lots of treble. Although more bass-heavy tracks lost some of their power, the sound balance was generally good, and easy to improve by adjusting our player's EQ settings.

Thanks to the separate noise-cancellation unit, the headphones are incredibly light and easy to wear. Sturdy hinges allow them to be folded down to fit inside the supplied case, which also contains aeroplane and ¼in jack plug adaptors.

Though expensive, this is a comfortable, well-built set of active noise-cancelling headphones with great sound quality.

OVER-EAR HEADPHONES 3.5mm stereo jack plug, 1.8m cable, 65g
PART CODE 500370

DETAILS www.sennheiser.co.uk

- ✓ Effective noise cancellation; good quality; lightweight
- ✗ Expensive

PANASONIC
RP-HC500

★★★

£139 inc VAT

From www.panasonic.co.uk

The closed housing of Panasonic's RP-HC500 headphones blocks out a lot of outside noise, and the noise-cancellation circuitry does even more to eliminate low-level noise from sources such as computers, engines and air conditioners. The characteristic hiss produced by the circuitry was particularly audible when not connected to an audio source. It could even be heard over some of our audio test tracks, most noticeably soft folk and classical music, but it's fairly easy to ignore.

The headphones weren't uncomfortably heavy, but they became warm after a short period. Music sounded a little dull and distant when we switched off noise cancellation, but audio quality with it enabled was clear and well balanced at flat EQ settings. High notes and mid-range tones were clear and well defined, while the headphones produced a wide range of bass notes, which sounded powerful without overwhelming the rest of the sound.

These headphones have good audio quality, but the hiss of their circuitry, warm earpieces and very high price all count against them.

ON-EAR HEADPHONES 3.5mm stereo jack plug,
1.5m cable, 182g
PART CODE RP-HC500

DETAILS www.panasonic.co.uk

- ✓ Good audio quality
- ✗ Audible noise cancellation hiss; very expensive

NON-NOISE CANCELLING		BUDGET BUY				BEST BUY			
MANUFACTURER	MAXELL	PHILIPS	TESCO	MAXELL	ZALMAN	PHILIPS	SAITEK	SENNHEISER	PANASONIC
Model	Jelleez	SHE2550 Extra Bass	Technika TA-708 Full Size Headphones	HP-550F Foldable Full Cup Headphones	ZM-DS4	SHE9700	A300 Stereo Headphones	HD 465	RP-HJE500
Rating	★★★	★★★★★	★★	★★★	★★★	★★★★★	★★	★★★★	★★★
SPECIFICATIONS									
Type	Earbuds	Earbuds	Over-ear headphones	Over-ear headphones	Over-ear headphones	Earplugs	Earbuds	On-ear headphones	Earplugs
Driver	Open	Open	Closed	Closed	Open	Open	Open	Open	Closed
Active noise cancelling	No	No	No	No	No	No	No	No	No
Power source	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sensitivity	98dB	106dB	105dB	102dB	103dB	103dB	Not disclosed	110dB	104dB
Frequency response	20-22,000Hz	12-22,000Hz	15-20,000Hz	10-28,000Hz	50-20,000Hz	6-23,500Hz	20-20,000Hz	18-21,500Hz	6-25,000Hz
Impedance	32 ohms	16 ohms	32 ohms	32 ohms	32 ohms	16 ohms	18 ohms	32 ohms	16 ohms
Plug type	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug
In-line volume	No	No	No	Yes	No	No	No	No	No
Weight	6g	8g	172g	122g	122g	6g	16g	214g	6g
Cable length	90cm	1.10m	1.70m	1.52m	1.50m	60cm	35cm	3.00m	60cm
Supplied accessories	None	Foam covers	None	¼in jack plug adaptor, aeroplane adaptor, soft pouch	None	Three pairs of rubber sleeves, 60cm extension cable, carrying case	Two 70cm extension cables, soft pouch	¼in jack plug adaptor	Three pairs of rubber sleeves, 60cm extension cable, soft pouch
BUYING INFORMATION									
Price including VAT	£3.11	£3.31	£7.97	£10	£14	£16	£16	£32	£40
Supplier	www.aprmedia.co.uk	www.yoyotech.co.uk	direct.tesco.com	www.amazon.co.uk	www.yoyotech.co.uk	www.lambda-tek.com/componentshop	www.yoyotech.co.uk	www.scan.co.uk	www.panasonic.co.uk
Details	www.maxell.eu.com	www.philips.co.uk	direct.tesco.com	www.maxell.eu.com	www.zalman.co.kr	www.philips.co.uk	www.saitek.com	www.sennheiser.co.uk	www.panasonic.co.uk
Part code	190523	SHE2550/00	TA-708	190562	ZM-DS4	SHE9700/00	DM06	500157	RP-HJE500

		PASSIVE NOISE CANCELLING				ACTIVE NOISE CANCELLING			
		BEST BUY		BEST BUY					
MANUFACTURER	CREATIVE	ETYMOTIC RESEARCH	DENON	SHURE	SHURE	MAXELL	MAXELL	SENNHEISER	PANASONIC
Model	Aurvana Live! Headphones	ER-6i	AH-C551	SE210	SE310	HP/NC-III	HP-NC18	PXC 300	RP-HC500
Rating	★★★★★	★★★★	★★★★	★★★★★	★★★★	★★★	★★★★★	★★★★	★★
SPECIFICATIONS									
Type	Over-ear headphones	Earplugs	Earplugs	Earplugs	Earplugs	Over-ear headphones	Earplugs	Over-ear headphones	On-ear headphones
Driver	Closed	Closed	Open	Closed	Closed	Closed	Closed	Closed	Closed
Active noise cancelling	No	No	No	No	No	Yes	Yes	Yes	Yes
Power source	N/A	N/A	N/A	N/A	N/A	2x AAA	1x AAA	2x AAA	1x AAA
Sensitivity	103dB	108dB	104dB	114dB	111dB	106dB	105dB	107dB	108dB
Frequency response	10-30,000Hz	20-16,000Hz	15-24,000Hz	25-18,500Hz	22-19,000Hz	20-22,000Hz	20-20,000Hz	8-21,500Hz	8-22,000Hz
Impedance	32 ohms	16 ohms	16 ohms	26 ohms	28 ohms	32 ohms	32 ohms	300 ohms (nominal)	32 ohms
Plug type	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug	3.5mm stereo jack plug
In-line volume	No	No	No	No	No	No	Yes	No	No
Weight	196g	4g	8g	10g	10g	110g	14g	65g	182g
Cable length	1.20m	1.50m	50cm	45cm	45cm	1.83m	1.60m	1.80m	1.50m
Supplied accessories	¼in jack plug adaptor, 150cm extension lead	Three pairs of sleeves, shirt clip, soft pouch, replacement filters, filter changing tool	Three pairs of rubber sleeves, 80cm extension cable, semi-rigid case	Seven pairs of rubber/foam sleeves, 91cm extension cable, semi-rigid case, earphone cleaning tool	Seven pairs of rubber/foam sleeves, 91cm extension cable, semi-rigid case, earphone cleaning tool	Aeroplane adaptor, carrying pouch, two AAA batteries	Three different pairs of sleeves, aeroplane adaptor, semi-rigid case, lanyard, AAA battery	¼in jack adaptor, aeroplane adaptor, semi-rigid case, two AAA batteries	¼in jack plug adaptor, semi-rigid case
BUYING INFORMATION									
Price including VAT	£65	£66	£70	£80	£110	£20	£45	£86	£139
Supplier	www.komplett.co.uk	www.iheadphones.co.uk	www.johnlewis.com	www.iheadphones.co.uk	www.play.com	www.richersounds.com	www.amazon.co.uk	www.pcbw.com	www.panasonic.co.uk
Details	www.creative.com	www.etymotic.com	www.denon.co.uk	www.shure.co.uk	www.shure.co.uk	www.maxell.eu.com	www.maxell.eu.com	www.sennheiser.co.uk	www.panasonic.co.uk
Part code	51EF0060AA001	ER6i	AH-C551	SE210	SE310	HP/NC-III	HP-NC18	500370	RP-HC500

Labs verdict Headphones

This particular Labs was a tough group to judge, as even some of the cheapest headphones in the group were comfortable to wear and had good sound quality. In the end, four sets of headphones really stood out.

If you're short of cash, Philips' SHE2550 Extra Bass earphones are a great choice, combining an

incredibly low price with good overall sound quality. They win a Budget Buy award.

If you're willing to spend a bit more and you want to listen to music on the move, then Philips' SHE9700 earphones are the set to buy. They have detailed, well-balanced sound and they cost just £16.

Our Best Buy full-size headphones are Creative's Aurvana Live! Set. They're comfortable to wear and sound great, so they are perfect for listening to music at home.

If you want to shut out the hustle and bustle of the outside world, you should consider either passive or active noise-

cancelling headphones. Maxell's HP-NC18 earphones have some of the best active noise cancellation we have heard. However, Shure's SE210 passive noise-cancelling earphones shut out more noise, and have the best sound quality in the group. They are our Best Buy for noise cancellation. **CB**

